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Abstract

The invention relates to a device for generation of microwaves comprising a coaxial virtual cathode oscillator (1) with an outer cylindrical tube forming a cathode (2) and connected to a transmission line (8) for feeding the cathode (2) with voltage pulses, and an inner cylindrical tube, at least partially transparent for electrons, forming an anode (3) and connected to a transmission device (8) for outputting microwave radiation generated by the formation of a virtual cathode (4) inside an area enclosed by the anode. Through the introduction of a centre conductor (5) arranged to coincide with the centre axle (19) for the cathode's (2) outer cylindrical tube and in electrical connection with the tube a device for generation of microwaves is obtained having improved energy efficiency and better broadband performance.

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(Figure 4 is proposed for publication)